

# Breakspear Medical Bulletin

Breakspear Medical Group Ltd, Issue 16

## Notes on sleep apnoea

Do you snore at night, disturbing your partner? Do you feel sleepy during the day? Approximately 5% of men and 2.3% of women suffer from sleep apnoea.

Abnormal breathing during sleep is often due to obstructive sleep apnoea. With this condition, the airways can be partially or completely blocked which causes the person to wake up and take a gasping breath. This can also happen when the airway muscles relax with sleep.

People who have obstructive sleep apnoea often get what is called the



"sleep apnoea syndrome" which is lack of breathing and is associated with excessive daytime sleepiness.

Another form of failure to breathe correctly is

called central apnoea, which is when the person does not make an effort to breathe. This happens because the signals to the respiratory muscles and the signals causing breathing are not functioning. The signals are from a part of the brain called the brainstem, which is a co-ordinator of the muscular effort of breathing.

(Continued on page 10)

## Dr Christopher Heard's retirement announcement



It is with regret that we announce that Dr Christopher Heard will be retiring from practice at the end of March 2008.

Breakspear Hospital will continue to offer a service for the biomedical treatment of children on the autistic spectrum and more details of this service will be provided in due course.

See page 7 for Dr Heard's heartfelt best wishes to all those he has known throughout his 18 years of practice.

#### breakspearmedical.blogspot.com

#### Comment on Dr Heard:

"Zac, my son, is 10 and autistic.... Sadly we had to wait a whole year for an appointment but...the wait was well worth it. We have a wonderful person helping Zak called Dr Christopher Heard and to us he is our saviour; he is a truly wonderful dedicated person who is helping us bring our son back.

...[M]y son is finally starting to speak and his behaviour is 100% better as is his concentration, interaction, etc. I can't thank Dr Heard enough; he was the first person we saw who dealt with Zak as an individual... You just cannot put a price on that feeling."

#### Spring 2008

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**England and Wales are at risk of measles epidemic according to WHO.** See story on page 8

www.breakspearmedical.com

# On the market: neuromuscular tape

## Dr Christabelle Yeoh

Neuromuscular tape (also known as CureTape<sup>®</sup>) is a novel drug-free method of relieving pain. It has been used for many years in Japan to treat a variety of conditions and has recently been seen

on western sport celebrities including David Beckham.

The taping concept is based on the activation of the body's neurological and circulatory systems. There are



ongoing trials for its use in the medical sphere and in post-operative conditions. Recently there has been an emphasis on teaching patients to self-administer the tape for a simple drug-free solution.

Since its recent introduction at Breakspear Hospital, many patients (and staff) have found it to be an extremely useful treatment for all sorts of body aches and pains.

### **Breakspear Medical Bulletin**

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Breakspear Medical Bulletin is a private publication that we aim to produce quarterly. It is for the promotion of environmental medicine awareness and Breakspear Medical Group Ltd. This newsletter is not intended as advice on specific cases but as a forum of information researched and stored at Breakspear. We urge readers to discuss the articles in this bulletin with their healthcare practitioners. Unauthorised reproduction of this newsletter, or quotation except for comment or review, is illegal and punishable by law.

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CureTape<sup>®</sup> can be used on most parts of the body, but is particularly useful for joint pain and muscular aches. Muscles are not only responsible for governing the movements of the body but also control blood circulation, lymphatic

Since its recent introduction at Breakspear Hospital, many patients (and staff) have found it to be an extremely useful treatment for all sorts of body aches and pains. function, body temperature and pain. Muscles are constantly compressed (contracted) and decompressed

(extended) within a normal range. However, when a muscle is inflamed, swollen or stiff due to fatigue, the space between the skin and muscle is "compressed", resulting in constriction to the flow of lymphatic fluid.

This compression also applies pressure to the pain receptors beneath the skin, which in turn communicate discomfort signals to the brain, resulting in myalgia (muscular pain).

CureTape<sup>®</sup> aims to give free range of motion in the body's muscular system to heal itself biomechanically by allowing enhanced flow of both blood circulation and lymphatic flow. This effect occurs over hours and days to allow a reduction of swollen joints and softening of stiff, painful muscles.

There is also a rapid analgesic (painkilling) effect by the triggering of a neural signal which overrides ongoing pain signals. This is done by triggering nerve receptors in the skin that send a

(Continued on page 8)

## www.breakspearmedical.com/survey



Complete our second on-line survey to give us your thoughts on mobile phones and how they affect you.

#### PAGE 2



## Ask Dr Yeoh

I've never suffered from depression in the past but for the past 6 months. I have been feeling generally ill, flu-like and depressed and I don't know if this is related.

but I also have a rash. My GP has given me antidepressants but I am still feeling very low. Is there anything else that can be done?

There are many causes of depression. 'Endogenous' depression can occur due to stressful life events, such as a major move, or bereavement, or divorce. This sort of depression would hopefully improve depending on a person's social support and situation.

Depression may also affect a person seemingly out of the blue. There may be several other causes for this to happen, but when it is combined with feeling ill and having other physical symptoms like a rash or fever, then the depressive symptoms should not be thought to be purely endogenous. The depression may be treated with antidepressants, but the underlying cause should also be sought.

The known medical causes of depression include thyroid disorders, multiple sclerosis, obstructive sleep apnoea, systemic lupus erythematosus and infections such as syphilis, HIV and Lyme disease. For example Lyme disease has been described as the cause of panic-like episodes. These cases were also found to complain of sensitivity to light, sound and touch, joint pains, cognitive difficulties and neurological pain. They were found to have positive tests for borreliosis, babesiosis and erhlichiosis. Treatment of their infections resulted in reduction of symptoms.

Lyme disease can be a neuropsychiatric illness.<sup>2</sup> A broad range of psychiatric reactions have been associated with Lyme disease, including paranoia, dementia, schizophrenia, bipolar disorder, panic attacks, major depression, anorexia nervosa and obsessive compulsive disorder.

A further recent report describes Bartonella as the underlying cause of new onset depression, panic attacks and personality changes.<sup>3</sup> Bartonella should be suspected when depression or other psychiatric symptoms are reported together with the presence of a rash, fevers, enlarged lymph nodes, fatigue, vision abnormalities and neurological pain. Bartonella may be transmitted by fleas, flea faeces, cat

scratches or licks, ticks, lice and biting flies. Nine Bartonella bacteria have been identified that are known to infect humans. Currently, the largest national laboratories in the US offer tests for only 2 species (B quintana and B henselae). It is therefore necessary to carefully consider the risk factors and associated

symptoms in order

Nine Bartonella bacteria have been identified that are known to infect humans:

B henselae

- B elizabethae
- B grahamii •
- B vinsonii subsp. arupensis
- B vinsonii subsp. berkhoffii
- B quintana
- B washoensis
- B koehlerae
- B rochalimae

to make the provisional diagnosis and thus allow consideration of antibiotic therapy. As Bartonella is an emerging infection, there is no clear standard of care with antibiotic therapy. Antibiotics that have been used with reported success include combinations of azithromycin, rifampicin, co-trimoxazole, quinolones (levofloxacin, ciprofloxacin) and doxycycline. Penicillin and cephalosporins are not active against the organism. Treatment regimes last 3 to 6 weeks on average, with severe infections requiring more than 3 months of treatment.

If you are suffering not only from depression, but also from other physical complaints, my advice would be to talk to your doctor about possible infectious causes of depression, particularly if you can identify some of these risk factors. My view is that these infections should be tested for, and, if identified, should be treated with the correct antibiotics.

At Breakspear Hospital, we test for Lyme, Bartonella and other tick-borne infections, using specialist laboratories in the US and Europe and if your history, symptoms and test results strongly indicate it, you should discuss a trial of antibiotics under close supervision from your doctor.

<sup>1.</sup> Sherr VT. Panic attacks may reveal previously unsuspected chronic disseminated Lyme disease. J Psychiatr Pract. 2000;6:352-6.

<sup>2.</sup> Fallon BA, Nields JA. Lyme disease: a neuropsychiatric illness. Amer J Psychiatry. 1994;151:1571-83.

<sup>3.</sup> Schaller JL, Burkland GA, Langhoff PJ. Do Bartonella infections cause agitation, panic disorder, and treatment-resistant depression? MedGenMed. 2007;9:54.

## Your thoughts on water fluoridation

A number of our Bulletin readers and website visitors completed our first on-line survey which provided the following results:

- 29% responded that the water in their house is fluorinated while 50% did not know if it is.
- 79% believe that water fluoridation should cease worldwide.
- 29% feel that they have personally experienced ill-health due to water supply fluoridation.
- 71% of respondents were women.

# Notes on Restless Legs Syndrome

## Dr Terry Daymond

Sitting in the armchair at home, watching the evening programmes on television, you suddenly get the desire to move your legs. It is an unpleasant sensation, made worse by sensory disturbances and a feeling of pins and needles, tingling, burning, crawling or RLS can seriously affect sleep, as it is a disorder associated with periodic limb movement in sleep (PLMS). Movements are involuntary and can frequently cause the person to wake up. RLS is a common cause of insomnia.

RLS can present at any age and may run in families, indicating a genetic cause. The

cramp occurring in the legs. The symptoms are bad enough for you to have to get up and move around, which eases the



It affects approximately 5-15% of the population of any age, but is worse in the elderly, affecting 10-25% of those over 65, and more women than men. secondary causes are due to iron deficiency, as may occur in pregnancy, renal failure, frequent donations of blood, or microscopic

situation, but they quickly return when you rest again. You are not imagining things: you may well be suffering from the condition called Restless Legs Syndrome.

Restless Legs Syndrome (RLS) was defined in 1672, but has only more recently come to the attention of the medical profession. It affects approximately 5-15% of the population of any age, but is worse in the elderly, affecting 10-25% of those over 65, and more women than men. It may be primary (due to a genetic defect) or secondary (due iron deficiency). It is caused by defects in transmission of impulses across nerves in the brain by a chemical called dopamine. Iron is required to make this chemical and, therefore, its deficiency could lead to RLS.

RLS is defined according to the following criteria:

- the sensation of an urge to move the limbs, commonly legs, usually associated with paraesthesia (pins and needles)
- onset or worsening of symptoms at rest
- short term relief of symptoms with movement
- worse at night, relieved in the morning after sleeping

bleeding from the bowel. It can also occur in nutritional deficiencies and occasionally iron and folate are deficient in this situation. Bacterial overgrowth in irritable bowel syndrome is another common cause.

Lifestyle factors that trigger or exacerbate RLS include excesses of caffeine, smoking and alcohol, and medications include antidepressants, anti-emetics and the drugs used in Parkinson's disease.

Management, therefore, includes, a two-pronged attack. It is important to identify iron deficiency and its cause and to correct this. Sometimes folate needs to be prescribed, in addition to the iron. Iron tablets, such as ferrous sulphate, 200mg three times a day, or correction of iron deficiency in the diet is necessary.

Secondly, drugs called dopamine agonists can be very beneficial and these can be prescribed by your doctor.

Anyone who suffers from RLS should seek medical advice. A simple iron tablet may cure the condition!

# The EU is addressing alcohol abuse

With 200,000 annual deaths, alcohol is the third leading risk factor for death and disability in the European Union (EU) which is ahead of obesity and four times that of illicit drugs.

equation but poor health, mental and/or physical, affects work, home and leisure behaviour. Violence, hooliganism, crime, social exclusion, and drink driving not only affect the drinker and their family but the whole population.

An individual's impairment due to alcohol is

affected by a number of factors. These factors include:

In 2006, the EU Commission published a strategy with 5 health priority themes:

- Muscle to fat ratio, height and weight
- Genetic variation
- Coexisting disease
- Drug interactions

#### These variables are unpredictable and vary with each individual. The level

of impairment due to an amount of alcohol which would theoretically, in an ideal subject, give a threshold level of 80mg/100ml might in fact cause a significantly higher impairment of cerebral function and muscular incoordination. Obviously this would have serious consequences in regards to road traffic safety and acceptable legal levels of alcohol in the blood.

Misuse of alcohol and other substances. from mild over-indulgence to frank addiction, has important health implications as well as social dimensions. Physical health is a small part of the

- To protect children and young people
- To reduce road deaths and injuries
- · To prevent harm in adults and reduce negative impacts in the workplace
- To inform and educate the population
- To develop and maintain an evidence base.

By improving health information and knowledge, responding rapidly to health threats and by addressing health determinants, the EU Commission will be focussing on key lifestyle factors, among which is the consumption of alcohol.

> a progressive illness. In the UK about 2 in 100 women, and about 7 in 100 men are alcoholdependent. Identifying and admitting to an alcohol problem is often the most difficult step in treatment.

For more information on the EU's health priorities particularly in relation to alcohol policy, visit www.eurocare.org. Eurocare is a member of the EU Health Forum, which is an instrument to ensure openness and transparency in the Community approach to health.

## Breakspear Hospital's Rehabilitation Programme

Our Rehabilitation Programme starts with a consultation with one of our specialist doctors. He or she will perform a physical assessment, take a full medical history and recommend investigations as appropriate. These will include an estimation of liver function and nutritional state. Many patients become

nutritionally deficient when alcohol is consumed in excess. Where appropriate, psychological or psychiatric assessment, stress management and counselling can be arranged with associated professionals. We have a well-established detoxification regime using a combination of vitamin therapy, exercise therapy, saunas and IRATHERM<sup>®</sup> whole-body hyperthermia treatment. We have full medical facilities to minimise withdrawal reactions and we will advise on specific diets for individual patients. For more information, telephone Reception 01442 261 333 and request a copy of our Rehabilitation Programme information backage.





All these are areas where political action is needed nationally and within the FU.

It is deterioration in work performance or family relationships that often prompts people to seek help and advice

Alcoholism is

# New thoughts on Type B malnutrition

In 2006, the United Nations acknowledged a new kind of malnutrition. Type A malnutrition is classically associated with developing countries, where there is inadequate consumption of calories and nutrients.

indicate huge depletions in the mineral content of various foods. For example, according to Thomas's report, from 1940 to 1991, the calcium content of boiled broccoli fell from 160mg (per 100g sample) to 40mg, which is a drop of 75%,

The new malnutrition is Type B, which is more common in the west where food availability is not the problem. Type B



malnutrition is a result of multiple micronutrient depletion due to the quality of the food rather

than the availability of food. The overweight can

As reported in CAM magazine October 2007, chiropractor and nutritionist David Thomas says

that just educating people to eat better is not

Thomas compared official food composition

tables over the last 60 years and his findings

be just as malnourished as the starving.

Type B malnutrition is a result of multiple micronutrient depletion due to the quality of the food rather than the availability of food. and the iron content of boiled spinach from 4mg to 1.6mg, which is 60% less.

Telling people that they need to eat food grown

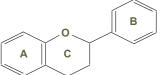
in healthy soils that is less processed and less contaminated by pesticides, herbicides, preservatives, fungicides, antibiotics and hormones etc, and to drink plenty of filtered water is just the start.

Evidence demonstrates that if people suffering from Type B malnutrition change their lifestyle by taking steps such as increasing their level of exercise and taking supplements, they can stabilise and even reverse the effects.

## Nutritional term explained



Our nutritional consultant, Ron Leon, describes a commonly used nutritional term with a simple definition together with a list of common food sources.



going to solve malnutrition.

**Flavonoids** are a group of compounds synthesised by plants, which share a common chemical structure. Plant flavonoids play a key role as bio-regulators in humans; their main role is to prevent the onset of degenerative disease processes by helping to regulate how human cells age.

Flavonoids can be divided into subclasses.

### **Common Dietary Flavonoids**

Flavonoid Subclass	Dietary Flavonoids	Common Food Sources
Anthocyanidins	Cyanidin, Delphinidin, Malvidin, Pelargonidin, Peonidin, Petunidin	Red, blue and purple berries, red and purple grapes, red wine
Flavanols	Catechin, Epicatechin, Epigallocatechin, Epicatechin gallate, Epigallocatechin gallate, Theaflavins, Thearubigins, Proanthocyanidins	Catechins: Teas (particularly green and white), chocolate, grapes, berries, apples Theaflavins, Thearubigins: Teas (particularly black and oolong) Proanthocyanidins: Chocolate, apples, berries, red grapes, red wine
Flavanones	Hesperetin, Naringenin, Eriodictyol	Citrus fruits and juices (e.g. oranges, grapefruits, lemons)
Flavonols	Quercetin, Kaempferol, Myricetin, Isorhamnetin	Yellow onions, spring onions, kale, broccoli, apples, berries, teas
Flavones	Apigenin, Luteolin	Parsley, thyme, celery, hot chilli peppers
Isoflavones	Daidzein, Genistein, Glycitein	Soya beans, soya products, legumes

# Dr Christopher Heard's personal message



I am grateful for the opportunity to say goodbye to readers of this Bulletin, many of whom I know as patients, or their relatives, or as friends, from the years I have worked at Breakspear.

Meeting patients and hearing about their extraordinary

lives, misfortunes and discoveries has been a fascinating and deeply humbling experience.

I started working with Jean in 1990; her exceptional experience, guidance and humour were formative. I have thoroughly enjoyed the challenges afforded by the practice of environmental medicine in general and, in later years, the biomedical treatment of children and adults with autistic spectrum disorders. These areas are still evolving and, as with any dynamic system, demand an unusual degree of inquisitiveness and adaptability from the practitioners involved in them.

A child recently asked me, "What sort of doctor are you?"; after a moment's reflection, I said, "the sort who thinks around corners", and I still cannot think of a better way of describing what I have happily done for the last 18 years.

Breakspear has continued to evolve and expand and I wish all connected with it the very best for the future.

I shall miss the staff, the patients and the atmosphere of possibility; I thank all those who have sent their good wishes and kind words.

In approaching retirement, I am with Robert Browning:

Grow old along with me! The best is yet to be, The last of life, for which the first was made: Our times are in His hand Who saith "A whole I planned, Youth shows but half; trust God: see all, nor be afraid!"

I send my best wishes to you all.

"We have known and loved Chris for over 18 years. He has always been completely correct and professional, a true gentleman and a colleague with wit and humour. All of the staff have enjoyed his company and have been aware of how much his patients have appreciated his skill. We will miss him greatly but know that he will be happy in his retirement and we wish him well." - *Dr Jean Monro, Medical Director* 



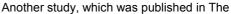
# Two studies on the adverse effects of mobile phones

Two separate studies on mobile phones have recently been published.

A Swedish researcher, Bengt Arnetz, professor of social medicine and stress research at Uppsala University, conducted a study on the effects of chatting on mobile phones on sleep deprivation.

It was determined that mobile phone radiation appeared to cause insomnia, headaches, and concentration difficulties.

Further studies are needed to determine how exactly the radiation upsets sleep patterns.



Environmental Doctor, was conducted to asses the association between mobile phones and the development of parotid gland tumours (PGTs), commonly known as salivary gland tumours.

Based on the largest number of benign PGT patients reported to

date, the study concluded that the results suggest an association between mobile phone use and PGTs for regular mobile phone users, or point to conditions that may yield higher levels of exposure, such as heavy use in rural areas.

# England and Wales are at risk of measles epidemic

England and Wales are among 7 countries which are expected to experience a measles epidemic at some point in the near future, according to a new report published in the Bulletin of the World Health Organization (WHO), doi:10.2471/ BLT.07.041129.

The age group most susceptible to infection in England and Wales are children. The researchers analysed the percentage of seronegative (lacking antibodies to fight the disease) people in each country and found that 18.9% of 2-4 year olds in England and Wales are seronegative. These results fall short of the WHO 2010 measles-elimination targets of <15% for this age group.

The report also emphasises that these countries need to strengthen their routine vaccination programmes and target catch-up campaigns at susceptible age groups, such as the elderly.

## What is measles?

Measles is one of the most infectious viral diseases of childhood.

It causes a skin rash and sometimes serious complications can occur, such as pneumonia, croup or encephalitis.

The time between exposure and development of symptoms is 10 -12 days and the infection usually lasts about 7 davs.

Measles starts with various symptoms such as a cold, fever, cough, conjunctivitis (red eve) and fatigue and these are followed 3 days later by a red blotchy rash, which starts on the face and spreads to the rest of the body. There may be some fine peeling of the skin after the rash fades.

## On the market: neuromuscular tape

(Continued from page 2) signal straight up to the brain and modulate the pain signals

experienced.

CureTape<sup>®</sup> is

adhesive on

straight onto

is applied

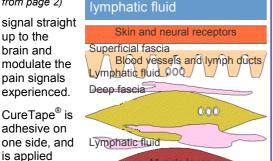


Diagram of space for flow of

the skin. It is not medicated and is latex-free. The tape can be kept on for several days until it peels off naturally with repeated washes or showering. It can be reapplied as necessary.

If you would be interested in learning how to use CureTape<sup>®</sup> for yourself, or for your family or friends, please make an appointment to see our Patient Liaison Officer, Carly Day, who is a registered sports physiotherapist and has also been trained in applying the tape for various conditions experienced by patients at Breakspear Hospital.

## 4 major functions of neuromuscular taping

### 1. Supports muscle function

- Improves muscle contraction in weakened muscles
- Reduces muscle fatique •
- Reduces over-extension and over-contraction of muscle
- Reduces muscle cramping
- Increases range of motion (ROM)
- Relieves pain •

### 2. Removes congestion in the flow of body fluids

- Improves blood and lymphatic circulation
- Reduces excess heat and chemical substances in tissue
- Reduces inflammation

### 3. Activates endogenous (intrinsic) analgesic systems

- Possibly activates spinal inhibitory system
- Possibly activates descending inhibitory system

### 4. Corrects joint problems

- Adjusts misalignment caused by spasm and shortened muscles
- Normalises muscle tone and abnormality of fascia in joints
- Improves ROM
- Relieves pain

# Did you know...?

# Toxic flame-retardant chemicals found in high levels in wild animals

According to The Australian newspaper, Australia's health authorities will examine whether there are implications for people from the discovery of toxic flame-retardant chemicals in the fatty tissue of Tasmanian devils.

Tasmanian devils are predominantly solitary carnivorous animals that live to about 6 years of age in the wild and are fairly common throughout Tasmania.

Since the 1990s the population of devils has been decreasing due to the spread of devil facial tumour disease. Wildlife biologists are calling for further work to be done to determine whether the high levels of toxic flame-retardant chemicals found in these animals could be a trigger for the disease.

The chemicals, often used in computers, white goods and carpets, are linked to thyroid and reproductive disorders and cancers.

While the discovery of these toxic flameretardants in these wild animals is concerning on its own, the risk of these chemicals to public health should be of global concern.



## Osteoarthritis in older people

Professor Terry Daymond, Breakspear Hospital's rheumatology consultant, had his article "Current approaches to the management of osteoarthritis" published in Prescriber (5 November 2007). The article is available to view in a pdf through a link on www.breakspearmedical.com/files/arthritis.html and provides physicians with practical advice for successful management of osteoarthritis.

## Recent newspaper headlines read, "Caffeine may help fight ovarian cancer"

According to recent study by senior author Shelley S Tworoger, assistant professor of medicine and epidemiology at Harvard Medical School and the Harvard School of Public Health, "It's too soon to recommend drinking caffeine to lower ovarian cancer risk". The researchers did, however, find an "inverse trend" for total caffeine intake and caffeinated coffee consumption and ovarian cancer, although the individual risk reductions did not reach statistical significance.

# Tissue hypoxia detected in many CFS/ME patients

Breakspear Hospital's Neuroscience Services specialist physician, Dr Peter

Julu, has been performing transcutanous blood gas tests and the results reveal tissue hypoxia in many patients with chronic fatigue syndrome/myalgic encephalomyelitis (CFS/ ME).

Tissue hypoxia or reduced oxygen (O2) levels can lead to tissue acidosis caused by the production of lactic acid from anaerobic metabolism. This causes a build-up of lactic acid, muscle pain and reduced muscle action.

There are a number of ways in which we are treating this:

- Breathing Exercises Dr Julu has been finding both low and high levels of CO2 in tissue capillaries in CFS/ME patients. As a result, we have therefore adapted various breathing techniques to promote nasal and diaphragmatic breathing, which can also aid relaxation.
- Massage From Spring 2008\*, Breakspear Hospital will be offering massage to patients before and after whole-body hyperthermia IRATHERM<sup>®</sup> treatment. Massage before IRATHERM<sup>®</sup> aims to coax toxins out of the tissues, thus allowing more efficient excretion through perspiration during the IRATHERM<sup>®</sup> session. Massage after the session, using organic oils, aims to improve blood circulation and therefore increase O2 availability to the tissues. Increased O2 levels and lymphatic massage will reduce the body's toxic load.
- Neuromuscular Tape This new technique of taping is a versatile alternative to oral analgesics as it can be used to increase circulation to tissues and aid lymph drainage. We use it to treat acute inflammation and prolapsed discs and to provide relief for pain in the joints. (See On the market: neuromuscular tape on



Complete our on-line survey to give us your thoughts on mobile phones and how they affect you.

www.breakspearmedical.com/survey

\* Massage therapy is not currently available at Breakspear Medical Group -2014



# New thoughts on retinoic acid as inflammation regulator



Researchers at the La Jolla Institute for Allergy & Immunology, California, USA, have been studying the importance of retinoic acid in regulating inflammation.

Retinoic acid is the acidified form of vitamin A after it has been broken down by the body.

The researchers have published their studies in Science magazine (June 2007) which show that inflammation can be controlled in living animals with retinoic acid. If this is found to be true in humans, this discovery may lead to new therapeutic treatment of various autoimmune and inflammatory diseases such as rheumatoid arthritis, colitis, and psoriasis.

The study also investigated treating T cells, a type of white blood cell which is responsible for several autoimmune and inflammatory diseases, with retinoic acid outside of the body in a test tube and then putting them back into the body.

TJ

## Notes on sleep apnoea

#### (Continued from page 1)

Partial obstruction to breathing is called hypopnoea. Breathing may also require an increased effort, which is due to resistance in the airways.

Symptoms of obstructive sleep apnoea are:

- snoring
- excessive daytime sleepiness
- choking or shortness of breath during sleep
- restless sleep
- unrefreshing sleep
- changes in personality
- morning headaches
- night sweats

The causes of sleep apnoea are:

- when the muscles at the back of the throat (the pharyngeal muscles) are too lax and fall back against the back of the throat
- very large tonsils which can obstruct the airway
- a small lower jaw

These structural problems cause obstruction to the airway during sleep and result in snoring.

The treated T cells prevented the formation of inflammatory T cells. This may prove particularly beneficial for controlling graft rejections, which occur when the immune system attacks the grafted tissue.

# Vitamin A is found naturally in many foods such as:

- Butter
- Sweet potatoes
- Carrots
- Spring greens
- Kale
- Pumpkin
- Spinach
- Sweet peppers

- Winter squash
- Apricots
- Cantaloupe melon
- Mango
- Liver (beef, pork, chicken, turkey)
- Fish liver oil
- Eggs
- Broccoli

Some of the other associated causes of snoring and obstructive sleep apnoea are when:

- people are obese and there is fat in the actual tissues of the pharynx, head and neck
- people have diminished thyroid function
- there are nasal problems
- very deep sleep is induced by alcohol or sedatives

The degree of sleepiness can be measured on the "Epworth Sleepiness Scale".

At a recent British Medical Journal Masterclass (12 February 2008), it was explained that people at particular risk of sleep apnoea are those who are overweight and men whose collar size is 17 inches or above.

The problem also relates to those who have diabetes or are at risk of developing diabetes, which is a condition called "the metabolic syndrome", when the levels of insulin in the body rise in response to high levels of sugar and carbohydrate being present in the blood. People who have problems with chronic rhinitis and sinusitis are also "at risk", because they need to mouth-breathe and cannot do so because of the lax pharynx muscles.

A combination of an electroencephalogram

# Available at our Pharmacy

Breakspear Pharmacy offers a collection of everyday products that we've selected as wise choices for sensitive people, all available at competitive prices. Visit our Pharmacy section at **www.breakspearmedical.com** for more information or talk to our Pharmacy staff.

#### To order:

**Call us:** + 44 (0) 1442 266 244. Call our Pharmacy Department between 9:00 am and 4:30 pm, Monday to Friday. Outside those times, you may leave your telephone number and we will call you back.

Send a fax: + 44 (0) 1442 266 388. Please write a note, stating which products you would like to purchase, including your credit card details and daytime phone number in case any details have not printed clearly.

Write a letter: Breakspear Pharmacy, Hertfordshire House, Wood Lane, Hemel Hempstead, Hertfordshire HP2 4FD. Please write a note, including your credit card details.

#### Or come and visit us at Breakspear Hospital!

All prices are inclusive of VAT, where applicable. There will be an additional charge for postage and packaging. Stock items will be dispatched within 24 hours of the order being processed. Breakspear Hospital reserves the right to alter prices without notice.

#### Jarrow Formulas Glucosamine + Chondroitin + MSM

Glucosamine + Chondroitin + MSM Combination provides efficacious quantities of Glucosamine Sulfate, Chondroitin Sulfate, and MSM combined with Vitamin C and Manganese for optimising joint health. Market price: £32.38\*

While our stock lasts, you pay only: £15.45\*

\* (prices include VAT)



reading (an electrical tracing of brain activity) at the same time as recording the temperature of air going past a little heat recording device, which can be clipped to the nostril, and an electrocardiogram (ECG) is a good method to monitor breathing patterns. This recording can be done when a person is drowsy, which means that the monitoring does not have to be done during overnight sleep sessions. It can be very quickly proved whether or not an individual has sleep apnoea because the brain recordings and the nasal thermistor recordings simultaneously give the same information and then it can be established whether there is poor oxygenation at night.

One of the treatments for sleep apnoea, according to the National Institute for Health and Clinical Excellence (NICE) in February 2008, is continuous, positive airway pressure (CPAP) of pressurised air. However, this is for people who have symptoms which affect their quality of life and who have difficulty in undertaking normal daily activities. The CPAP machine delivers oxygen during the night via a mask or nasal cannulae.

At Breakspear Hospital, patients with rhinitis (irritation and inflammation of the nasal mucous membrane) are often treated with great success using low-dose immunotherapy for allergies and sensitivities; this therapy can also stabilise the brainstem to correct sleep apnoea. Treatment for sleep apnoea may also involve addressing the underlying endocrine problems. Lifestyle changes, such as discontinuing evening alcohol and sedatives which will depress upper airway muscles, and stopping smoking may also help.

With the diagnostic management and the treatment options that Breakspear Hospital provides, as well as a variety of programmes to help patients to lose weight, lose the cravings for cigarettes and also undertake posture training and breathing exercises, we can offer a very good service to people with obstructive sleep apnoea.

(A detailed paper on sleep apnoea by Dr Jean Monro is available upon request.)

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# **BCG vaccinations**

According to the World Health Organization (WHO), there are about 30 million new cases of tuberculosis (TB) worldwide every year. Approximately 7,000 of these new cases are in England, concentrated in large towns and cities.

The bacillus Calmette Guérin (BCG) vaccine provides immunisation against TB.

Breakspear Hospital offers mercury-free BCG to babies, children and adults, to protect against TB, for £50\*.

A tuberculin skin test is carried out to determine past or present TB infection and is performed prior to BCG vaccinations on children over 1 year and adults. This test is called the Mantoux test, which is read in 48-72 hours. Our price for the Mantoux test is  $\pounds 50^*$ .

We also offer the QuantiFERON®-TB Gold test, which is a whole-blood test for use as an aid in diagnosing Mycobacterium tuberculosis infection, including latent tuberculosis infection (LTBI) and tuberculosis (TB) disease for £93\*. Although there is limited data on the use of QuantiFERON®-TB Gold test in children younger than 17 years of age, this test is currently used in evaluation of recent immigrants who have had BCG vaccination, and TB screening of health care workers and others undergoing serial evaluation for *M. tuberculosis*.

You do not need a referral. Advance payment is not required.

Simply make an appointment by telephoning our Immunisation Department at 01442 867 280.

\* Breakspear Medical Group reserves the right to change prices without notice.

# **Bulletin Board**



## **Christmas gathering**

Breakspear's staff Christmas party was held at the Moulin Rouge at Aldenham Country Park just before the hospital closed for the holidays. Staff members enjoyed an evening of fire jugglers and entertainers as well as dodgems, dinner and dancing.

Reduce your carbon footprint and help Breakspear Hospital Trust

If you sign up for email receipt of the Breakspear Bulletin, Breakspear Medical Group will donate £2 to Breakspear Hospital Trust. All you have to do is send your full name, current mailing address, and email address to Ljenkins@breakspearmedical.com with the subject heading: "Save the environment and donate to Breakspear Hospital Trust."



#### Supporting Children in Need

On 16 November 2007, Breakspear staff held a funny hat day to raise money for the BBC Children in Need charity. The money contributed is distributed to organisations supporting children aged 18 and under who have mental, physical or sensory disabilities; behavioural or psychological disorders; are living in poverty or situations of deprivation; or suffering through distress, abuse or neglect.





## **Breakspear Pathology on-line**

Breakspear Pathology is now offering on-line ordering to all registered practitioners. This enables practitioners to order for their patients various pathology services that are at competitive prices and performed at the same reputable laboratories as we use. Practitioners can register and order from:

www.breakspearstore.co.uk